(54) Title: SYSTEM AND METHOD FOR EVALUATING CREDIT RISKS
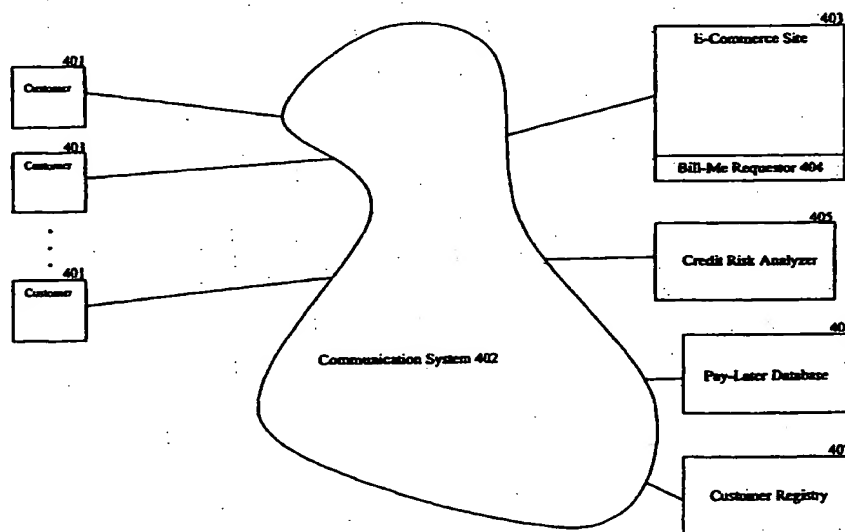
(57) Abstract: This invention provides systems and methods that facilitate bill-me transactions between customers (401) and electronic commerce merchants (403), register bill-me customers (407), and enable electronic commerce merchants (403) to reduce risks related to bill-me transactions (404). A preferred embodiments of the method of the invention includes the steps of receiving into a computer system a request for billing-riks analysis (405) from an electronic commerce merchant (403), verifying the identity of the customer (401), performing a billing-risk analysis (405), and transmitting, from the computer system, the billing-risk analysis (405) to the electronic commerce merchant (403).

SYSTEM AND METHOD FOR EVALUATING CREDIT RISKS

BACKGROUND OF THE INVENTION

This Application claims priority to Provisional Application No. 60/152,946 filed September 9, 1999. The specification of No. 60/152,946 is incorporated herein by reference. This invention relates to electronic commerce applications using communication networks such as the Internet, and more particularly to systems and methods that facilitate transactions between a customer and an electronic commerce merchant.

DESCRIPTION OF THE RELEVANT ART

Transactions between customers and electronic commerce merchants, conducted through electronic communication systems such as the Internet, have become an increasingly important part of the domestic United States and international economies. As with traditional face-to-face transactions, merchants involved in electronic commerce may not be familiar with their customers and, in particular, may have no knowledge of customers' ability to pay for goods or services. This problem is exacerbated when electronic communication systems are used since the customer is not physically present, and, therefore, traditional physical systems such as picture identifications cannot be used to establish the identity of customers with a significant degree of certainty.

As a result of the problems with determining the identity of customers and evaluating their ability to pay when electronic communication systems such as the Internet are used, it has become common for electronic commerce merchants to require customers to provide credit card numbers when purchasing goods or services. If a customer is unwilling to provide a credit card number, for example, because of concerns that the credit card number will be stolen or misused, the customer may be required to pay for his purchase outside of the electronic communication system by writing, for example, a check or a money order, and physically sending the payment to the merchant.

Accordingly, there is a need for a method that will assist electronic commerce merchants in identifying customers, and in enabling customers to effect purchases through an electronic communication system without the need for customers to provide credit card numbers.

SUMMARY OF THE INVENTION
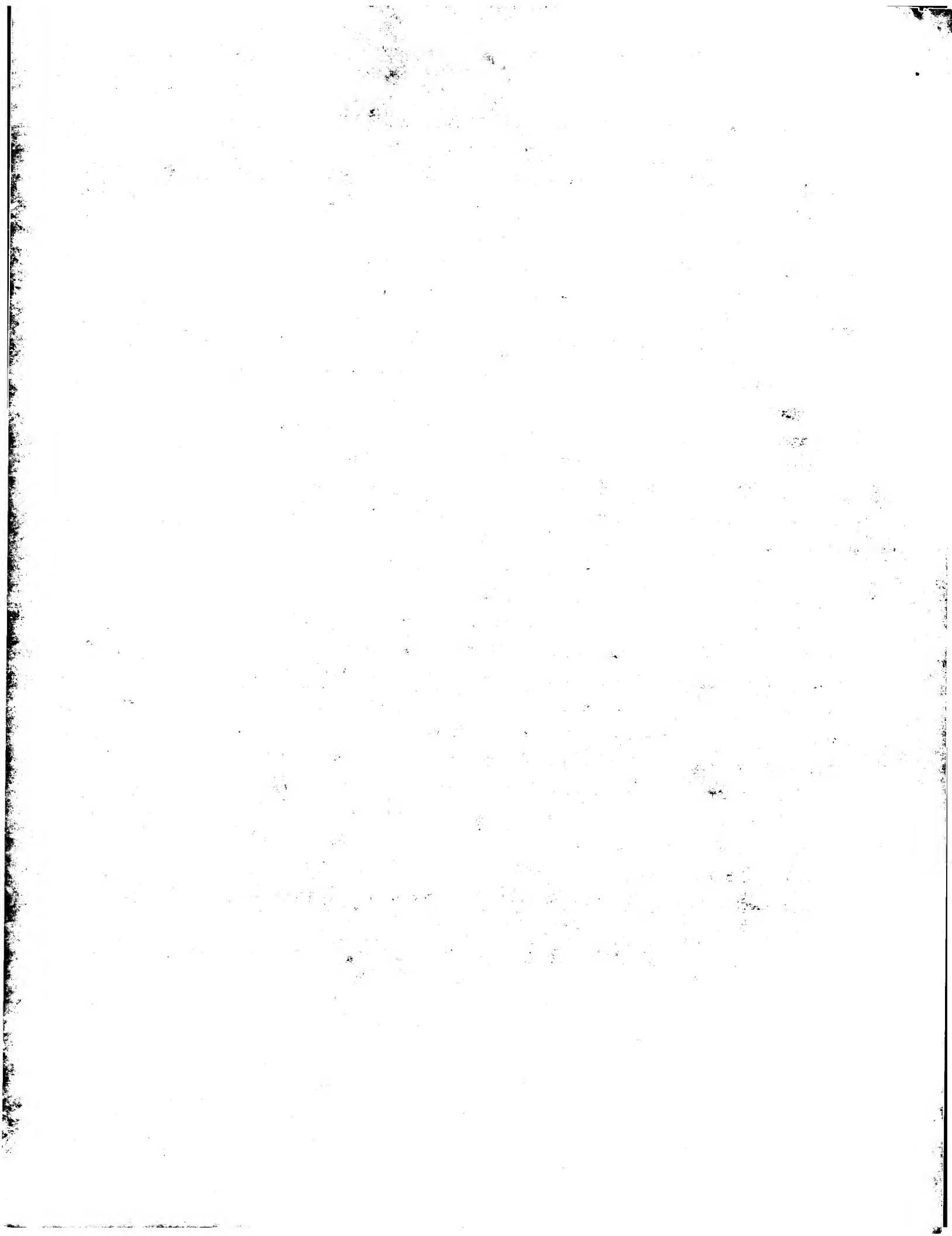
In preferred embodiments of the present invention, a bill-me (also referred to as a "pay-later") transaction occurs when a customer orders goods or services from an electronic commerce merchant through an electronic communication system such as the Internet, and the customer requests that the customer provide payment after the merchant

5   sends the goods or provides the services. Thus, in preferred embodiments of bill-me transactions, the merchant extends credit to the customer and has a need to evaluate the credit risk associated with the customer and the transaction.

An object of the invention is to provide a method to facilitate a transaction between a customer and an electronic commerce merchant by enabling the customer to

10   purchase goods and services without using a credit card.

An object of the invention is to provide a method to facilitate a transaction between a customer and an electronic commerce merchant by enabling the customer to evaluate the products or services of the electronic commerce merchant prior to paying for the products or services.

15   An object of the invention is to provide a method to facilitate a transaction between a customer and an electronic commerce merchant by assisting the electronic commerce merchant in determining if it is appropriate to extend credit to the customer.

An object of the invention is to facilitate the access of electronic commerce merchants to a pay-later database that contains credit-risk information on customers

20   (references to credit information contained in this Specification are for descriptive purposes in the context of the present invention and are not intended to be interpreted in the context of the Fair Credit Reporting Act).

An object of the invention is to facilitate the creation of, and the access of electronic commerce merchants to, a bill-me customer registry that pre-qualifies

25   customers for bill-me transactions.

An object of the invention is to enable electronic commerce merchants to reduce their credit risks related to bill-me customer transactions.

A preferred embodiment of a method of the present invention, as broadly described herein, for using a computer system to facilitate a transaction between a

30   customer and an electronic commerce merchant includes the steps of receiving into a computer system a request for billing-risk analysis from an electronic commerce merchant, verifying the identity of the customer, performing a billing-risk analysis,

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transmitting, from the computer system, the billing-risk analysis to the electronic commerce merchant. In this preferred embodiment, the request includes identification information, and the performing and verifying steps are responsive to the identification information. In a further preferred embodiment, the performing step is responsive to a

5   pay-later database. In a further preferred embodiment, the performing step is responsive to a bill-me customer registry.

A preferred embodiment of a method of the present invention, as broadly described herein, for using a computer system to register bill-me customers, includes the steps of receiving into a computer system a request for bill-me registration, verifying the

10 identity of the customer, performing a billing-risk analysis, and generating the bill-me registration in a bill-me customer registry. In this preferred embodiment, the request includes identification information on a customer, the verifying and performing steps are responsive to the identification information, and the generating step is responsive to the identification information and to the billing-risk analysis. In a further preferred

15 embodiment, the billing-risk analysis step is responsive to a pay-later database.

A preferred embodiment of a method of the present invention, as broadly described herein, for reducing electronic commerce merchant risks related to bill-me customer transactions includes the steps of packaging bill-me customer transactions that were generated by at least one electronic commerce merchant, and selling the packaged

20 bill-me customer transactions to a party unrelated to the electronic commerce merchants that generated the transactions.

Additional objects and advantages of the invention are set forth in part in the description which follows, and in part are obvious from the description, or may be learned by practice of the invention. The objects and advantages of the invention may

25 also be realized and attained by means of the instrumentalities and combinations particularly set out in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute part of the specification, illustrate preferred embodiments of the invention, and together with the

30 description, serve to explain the principles of the invention.

FIG. 1 is a flow chart depicting a preferred embodiment of a method for using a computer system to facilitate a transaction between a customer and an electronic commerce merchant.

FIG. 2 is a flow chart depicting a preferred embodiment of a method for using a computer system to register bill-me customers.

FIG. 3 is a flow chart depicting a preferred embodiment of a method for reducing electronic commerce merchant risks related to bill-me customer transactions.

FIG. 4 is a diagram depicting preferred embodiments of a system for facilitating a transaction between a customer and an electronic commerce merchant, and of a system for registering bill-me customers.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Reference will now be made in detail to the present preferred embodiments of the invention, examples of which are illustrated in the accompanying drawings. The detailed description is divided into the following sections: Overview, Transactions Between Customers and Electronic Commerce Merchants, Bill-Me Customer Registry, and Risk Reduction.

Overview

In preferred embodiments of the present invention, a bill-me transaction occurs when a customer orders goods or services from an electronic commerce merchant through an electronic communication system such as the Internet and instructs the merchant to send the goods or provide the services prior to receiving payment for the goods or services. In preferred embodiments of bill-me transactions, the merchant extends credit to the customer. In contrast, in other types of transactions, for example when the customer provides a credit card number that the merchant validates before shipping goods, the merchant itself does not extend credit or extends credit for a very short period of time and, in any event, takes virtually no credit risk. Thus, in preferred embodiments of bill-me transactions, merchants have a need to evaluate the credit risk associated with the customer and the transaction.

In preferred embodiments of the present invention, credit information on customers, which may serve as a pay-later database that is used, as is known in the art, to evaluate bill-me customers, is derived from consumer performance databases. For example, in direct mail marketing, databases are available that track consumer

performance in direct response credit offers. Other existing databases track consumer performance, for example, in honoring personal checks. While using such databases, merchants may also contribute their own files of under-performing consumers, thus aiding in maintaining a powerful and current consumer credit data set.

5   Preferred embodiments of the present invention comprise a system to handle real-time customer screening via the Internet and other computer networks in support of electronic commerce merchants (e-merchants). In preferred embodiments the invention comprises three main components which may be used alone or in combination. These components include a pay-later database, a customer registry and bill-me software.

10   In preferred embodiments, the pay-later database stores and makes available credit information on specific individuals which merchants may access via the bill-me software, as is known in the art. Records in the database contain credit information on individuals. In preferred embodiments, this information may be obtained from credit reporting services. Credit information on individual customers may also be obtained

15   from electronic commerce merchants subscribing to the database.

The customer registry, which in preferred embodiments may be maintained as a separate system, provides a vehicle for individuals to pre-qualify as customers acceptable to merchants as "pay-later" customers. In preferred embodiments, when a customer pre-qualifies, the customer may then be directed to electronic commerce merchants that offer

20   bill-me as a payment option.

In preferred embodiments, the bill-me software may be installed on an electronic commerce merchant's Internet website (or other computer network host). The bill-me software, in preferred embodiments, enables the electronic commerce merchant to offer customers the ability to direct the merchant to bill the customer, and for the customer to

25   pay later, while receiving the ordered goods or services immediately. In preferred embodiments, the bill-me software also provides merchants with real-time access to a pay-later database to evaluate and manage the credit risk for the particular customer and the particular transaction.

In preferred embodiments, the bill-me software is a Java applet residing on the

30   e-merchant server(s) that initiates communication requesting the bill me services. As is known in the art, the bill-me software enables communication across various channels including public and private internets. In preferred embodiments, the allowed protocols

for such communication are http and https.   In a preferred embodiment, incoming

requests for the bill-me service are managed by a cgi script residing in a web server (for

example, the Apache/Stronghold) environment. In this preferred embodiment, several

consumer fields (for example, name, address, telephone number, session ID, email

5   address, and initiating IP address) are passed to the bill-me software as http/https

variables, as is known in the art. The requesting Java bill-me software, having made the

request for service, will then listen for the request response.

In this preferred embodiment, upon receipt of the incoming request for service,

the cgi script parses, as is known in the art, the required TCP/IP information and

10   variables, removing unnecessary http headers. As is known in the art, in a preferred

embodiment, the credit risk evaluation process includes USPS address standardization for

validity and accurate matching to the pay-later database. The customer information

including the standardized address is matched to the pay-later database by match logic, as

is known in the art. In this preferred embodiment, a risk evaluation measure is derived

15   dynamically, as is known in the art, using all applicable matched data. Such risk

measures, as are known in the art, are optimally predetermined from matched data using

statistical software.

In preferred embodiments, the bill-me software will be turnkey to the e-merchant

from generating the order through invoicing and payment processing. In preferred

20   embodiments, the present invention also includes a financing option whereby a third

party would, effectively, purchase the receivables created by bill-me transactions,

removing financing risk from the merchant's decision. To the extent that this encourages

merchants to use the system and contribute the resulting performance data to the pay-later

database, it further strengthens the performance of the system in predicting credit risk.

25   Transactions Between Customers and Electronic Commerce Merchants

FIG. 1 depicts a flow chart of a preferred embodiment of a method for using a

computer system to facilitate a transaction between a customer and an electronic

commerce merchant. In preferred embodiments, the transaction refers to the potential

purchase of goods or services from the electronic commerce merchant by the customer on

30   a bill-me basis. In preferred embodiments, the transaction is facilitated by providing the

electronic commerce merchant with an analysis of the credit risk involved in dealing with

a particular customer on a bill-me basis. This method includes the steps of receiving into

a computer system a request for billing-risk analysis from an electronic commerce merchant, verifying the identity of the customer, performing a billing-risk analysis, and transmitting, from the computer system, the billing-risk analysis to the electronic commerce merchant. The request includes identification information on a customer, and

5   the verifying and performing steps are responsive to the identification information.

In the preferred embodiment depicted in FIG. 1, the step of receiving into a computer system a request for billing-risk analysis from an electronic commerce merchant is accomplished by Receive a request for billing-risk analysis step 101. In preferred embodiments, the request includes identification information on a customer. In

10   preferred embodiments, the computer system is a general purpose standalone computer system, a special purpose standalone computer system, a computer system formed from computer systems that are interconnected through a communication system, or other types of computer systems as are known in the art. In preferred embodiments, the computer system is connected to a communication system such as the Internet, and the

15   request is sent to the computer system through the communication system. In such preferred embodiments, the originator of the request may be an electronic commerce merchant that is also connected to the communication system. The operation of receiving the request is performed as is known in the art.

In the preferred embodiment depicted in FIG. 1, the step of verifying the identity

20   of the customer is accomplished by Verify the customer identity step 102. In preferred embodiments, the verifying operation is responsive to the identification information. A variety of techniques as are known in the art may be used to verify customer identities based on the identification information. In preferred embodiments, several consumer fields (for example, name, address, and telephone number) are included in the

25   identification information as http/https variables as is known in the art. This identification information, in preferred embodiments and as known in the art, is processed by a cgi script and the verification operation includes USPS address standardization and match logic.

In the preferred embodiment depicted in FIG. 1, the step of performing a billing-

30   risk analysis is accomplished by Perform a billing-risk analysis step 103. In preferred embodiments, the billing-risk analysis is responsive to the identification information. In further preferred embodiments, the billing-risk analysis is responsive to the customer

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identification verification step. A variety of techniques as are known in the art may be used to perform the billing-risk analysis operation for bill-me transactions. In preferred embodiments, a risk evaluation measure is derived dynamically, as is know in the art, using all applicable matched data from the verification step. Such risk measures, as are

5   known in the art, are optimally predetermined from matched data using statistical software.

In the preferred embodiment depicted in FIG. 1, the step of transmitting, from the computer system, the billing-risk analysis to the electronic commerce merchant is accomplished by Transmit the billing-risk analysis step 104. The transmitting operation

10   is performed as is known in the art. In preferred embodiments, the billing-risk analysis is transmitted to the electronic commerce merchant that requested the analysis through a communication system such as the Internet. as described above in connection with the receiving step.

In preferred embodiments, the performing a billing-risk analysis step is responsive

15   to a pay-later database. In preferred embodiments, the pay-later database stores and makes available credit information on specific individuals which merchants may access via the bill-me software, as is know in the art. Records in the database contain credit information on individuals. In preferred embodiments, this information may be obtained from credit reporting services. Credit information on individual customers may also be

20   obtained from electronic commerce merchants subscribing to the database. As is known in the art, in a preferred embodiment, the customer identity verification operation and the billing-risk analysis operation include USPS address standardization for validity and accurate matching to the pay-later database. The consumer information including the standardized address is matched to the pay-later database by match logic, as is know in

25   the art. In this preferred embodiment, a risk evaluation measure is derived dynamically, as is know in the art, using all applicable matched data. Such risk measures, as is know in the art, are optimally predetermined from matched data using statistical software.

In preferred embodiments, the performing a billing-risk analysis step is responsive to a bill-me customer registry. The bill-me customer registry, which in preferred

30   embodiments may be maintained as a separate database system, as is known in the art, provides a vehicle for individuals to pre-qualify as customers acceptable to merchants as pay-later customers. In preferred embodiments, a billing-risk analysis is performed on
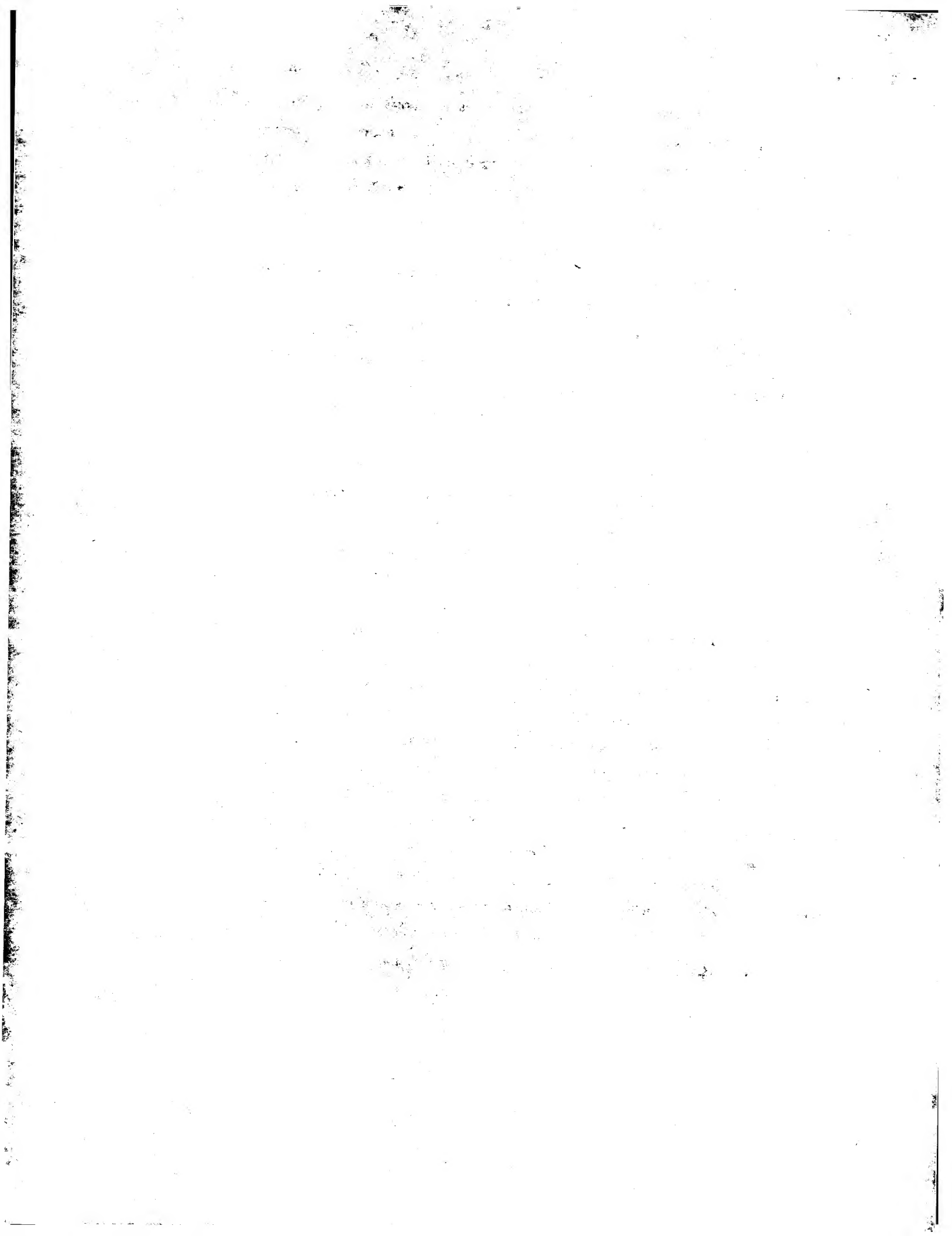
customers at the time that they are entered into the registry. Therefore, the billing-risk analysis performed on customers who are entered into the registry need, in preferred embodiments, only consider customer information that was obtained after the customer was entered into the registry. In preferred embodiments, when a customer pre-qualifies,
5   the customer may then be directed to electronic commerce merchants that offer bill-me as a payment option.

FIG. 4 depicts preferred embodiments of a system for facilitating a transaction between a customer and an electronic commerce merchant. As is known in the art, Customers 401 use Communication System 402 to conduct transactions with E-
10 Commerce Site 403. In preferred embodiments, Customers 401 may be individuals using personal computers, businesses using computer networks, or other entities, as are known in the art, that may conduct transactions for goods or services with electronic commerce merchants. In preferred embodiments, E-Commerce Site 403 is a hardware and software combination system or a software-only system providing e-commerce services for an
15 electronic commerce merchant, as is known in the art. In preferred embodiments, E-Commerce Site 403 contains software system Bill-Me Requestor 404 which supports bill-me transactions as described below. Communication System 402, in preferred embodiments, is the Internet, or is other public or private communication systems as are known in the art.

20 Credit Risk Analyzer 405, Pay-Later Database 406, and Customer Registry 407 are hardware and software combination systems or software-only systems that support bill-me transactions as described below. Pay-Later Database 406 and Customer Registry 407 operate in a manner similar to that of the pay-later database and the customer registry described above. In preferred embodiments, Credit Risk Analyzer 405, Pay-Later
25 Database 406, and Customer Registry 407 may reside on separate hardware platforms with separate communication connections with Communication System 402, or may freely share hardware platforms with other systems, including E-Commerce Site 403, as is known in the art.

As is known in the art, computer system hardware supporting systems such as E-
30 Commerce Site 403, Bill-Me Requestor 404, Credit Risk Analyzer 405, Pay-Later Database 406, and Customer Registry 407, generally comprises one or more processors

connected to one or more storage devices, with the storage devices storing a program for controlling the processor.

In the preferred embodiments depicted in FIG. 4 of a system for facilitating a transaction between a customer and an electronic commerce merchant, Credit Risk

5   Analyzer 405 includes a processor operative with a program to receive a request for billing-risk analysis from an electronic commerce merchant, verify the identity of the customer, perform a billing-risk analysis, and transmit the billing-risk analysis to the electronic commerce merchant. The request includes identification information on the customer, and the verify and perform operations are responsive to the identification

10 information.

In preferred embodiments, the receive, verify, perform and transmit operations are conducted in a manner similar to that described above for the corresponding operations in connection with FIG. 1. In preferred embodiments and as is known in the art, the request is generated by Bill-Me Requestor 404 as part of a transaction between E-Commerce Site

15 403 and Customer 401. In such preferred embodiments, the billing-risk analysis is transmitted to Bill-Me Requestor 404.

In preferred embodiments depicted in FIG. 4, the billing-risk analysis is responsive to Pay-Later Database 406. In preferred embodiments, Pay-Later Database 406 operates in a manner similar to that described above for the pay-later database

20 operations in connection with FIG. 1.

In preferred embodiments depicted in FIG. 4, the billing-risk analysis is responsive to Customer Registry 407. In preferred embodiments, Customer Registry 407 operates in a manner similar to that described above for the bill-me customer registry operations in connection with FIG. 1.

25

Bill-Me Customer Registry

FIG. 2 depicts a flow chart of a preferred embodiment of a method for using a computer system to register bill-me customers. The bill-me customer registry is

30 described in the previous section. This method includes the steps of receiving into a computer system a request for bill-me registration, verifying the identity of the customer, performing a billing-risk analysis, and generating the bill-me registration in a bill-me

customer registry. The request for bill-me registration includes identification information on a customer, the verifying and performing steps are responsive to the identification information, and the generating step is responsive to the identification information and the verifying step.

5   In the preferred embodiment depicted in FIG. 2, the step of receiving into a computer system a request for bill-me registration is accomplished by Receive a request for bill-me registration step 201. In preferred embodiments, the request includes identification information on a customer. In preferred embodiments, the computer system is a general purpose standalone computer system, a special purpose standalone computer system, a computer system formed from computer systems that are interconnected through a communication system, or other types of computer systems as are known in the art. In preferred embodiments, the computer system is connected to a communication system such as the Internet, and the request is sent to the computer system through the communication system. In such preferred embodiments, the originator of the request may be a customer that is also connected to the communication system. The operation of receiving the request is performed as is known in the art.

          In the preferred embodiment depicted in FIG. 2, the step of verifying the identity of the customer is accomplished by Verify the customer identity step 202. In preferred embodiments, the verifying operation is responsive to the identification information. A variety of techniques as are known in the art may be used to verify customer identities based on the identification information. In preferred embodiments, several consumer fields (for example, name, address, telephone number, session ID, email address, and initiating IP address) are included in the identification information as http/https variables as is known in the art. This identification information, in preferred embodiments and as known in the art, is processed by a cgi script and the verification operation includes USPS address standardization and match logic.

          In the preferred embodiment depicted in FIG. 2, the step of performing a billing-risk analysis is accomplished by Perform a billing-risk analysis step 203. In preferred embodiments, the billing-risk analysis is responsive to the identification information. In further preferred embodiments, the billing-risk analysis is responsive to the customer identification verification step. A variety of techniques as are known in the art may be used to perform the billing-risk analysis operation. In preferred embodiments, a risk

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evaluation measure is derived dynamically, as is know in the art, using all applicable matched data from the verification step. Such risk measures, as are known in the art, are optimally predetermined from matched data using statistical software.

In the preferred embodiment depicted in FIG. 2, the step of generating the bill-me registration in a bill-me customer registry is accomplished by Generating the bill-me registration step 204. In preferred embodiments, the bill-me customer registry is a database as described in the previous section. In these preferred embodiments, the generating operation is performed by creating, as is known in the art, a record in the bill-me customer registry that contains identification information. In preferred embodiments, the identification information includes USPS address standardization, as is know in the art.

In preferred embodiments, the performing a billing-risk analysis step is responsive to a pay-later database. The pay-later database was described in the previous section.

FIG. 4 depicts preferred embodiments of a system for registering bill-me customers. The elements of FIG. 4 were described in the previous section. In the preferred embodiments depicted in FIG. 4 of a system for registering bill-me customers, Credit Risk Analyzer 405 includes a processor operative with a program to receive a request for bill-me registration, verify the identity of the customer, perform a billing-risk analysis, and generate the bill-me registration in a bill-me customer registry. The request includes identification information on the customer, the verify and perform operations are responsive to the identification information, and the generate operation is responsive to the identification information and the billing-risk analysis.

In preferred embodiments, the receive, verify, perform, and generate operations are conducted in a manner similar to that described above for the corresponding operations in connection with FIG. 2. In preferred embodiments and as is known in the art, the request is initiated by Customer 401. In preferred embodiments and as is known in the art, the generate operation stores the bill-me registration in Customer Registry 407.

In preferred embodiments depicted in FIG. 4, the billing-risk analysis is responsive to Pay-Later Database 406. In preferred embodiments, Pay-Later Database 406 operates in a manner similar to that described above for the pay-later database operations in connection with FIG. 2.

Risk Reduction

FIG. 3 depicts a flow chart of a preferred embodiment of a method for reducing electronic commerce merchant risks related to bill-me customer transactions. In preferred embodiments, the electronic commerce merchant takes on the credit risk involved in bill-me transactions with the electronic commerce merchant's customers. Some electronic commerce merchants may desire to reduce or eliminate such credit risks. This method includes the steps of packaging at least one bill-me customer transaction that was generated by at least one electronic commerce merchant, and selling the packaged bill-me customer transactions to a party unrelated to the electronic commerce merchants that generated the transactions.

In the preferred embodiment depicted in FIG. 3, the step of packaging at least one bill-me customer transaction that was generated by at least one electronic commerce merchant is accomplished by Packaging at least one bill-me customer transaction step 301. In preferred embodiments, as is known in the art, bill-me customer transactions that share similar expected performance characteristics are packaged or "bundled" together for sale.

In the preferred embodiment depicted in FIG. 3, the step of selling the packaged bill-me customer transactions to a party unrelated to the electronic commerce merchants that generated the transactions is accomplished by Selling the packaged transaction step 302. In preferred embodiments, as is known in the art, the packaged bill-me customer transactions are in the form of accounts receivable, and are sold at a discount to a party unrelated to the electronic commerce merchants that generated the transactions. Thus, the risk of non-payment associated with the transactions is passed from the electronic commerce merchants to the unrelated party, and the unrelated party obtains the transactions at a discount.

It will be apparent to those skilled in the art that various modifications can be made to this invention of a system and method for evaluating credit risks, without departing from the scope or spirit of the invention or of the claims. It is also intended that the present invention and appended claims cover modifications, variations and equivalents of the system and method for evaluating credit risks of the present invention.
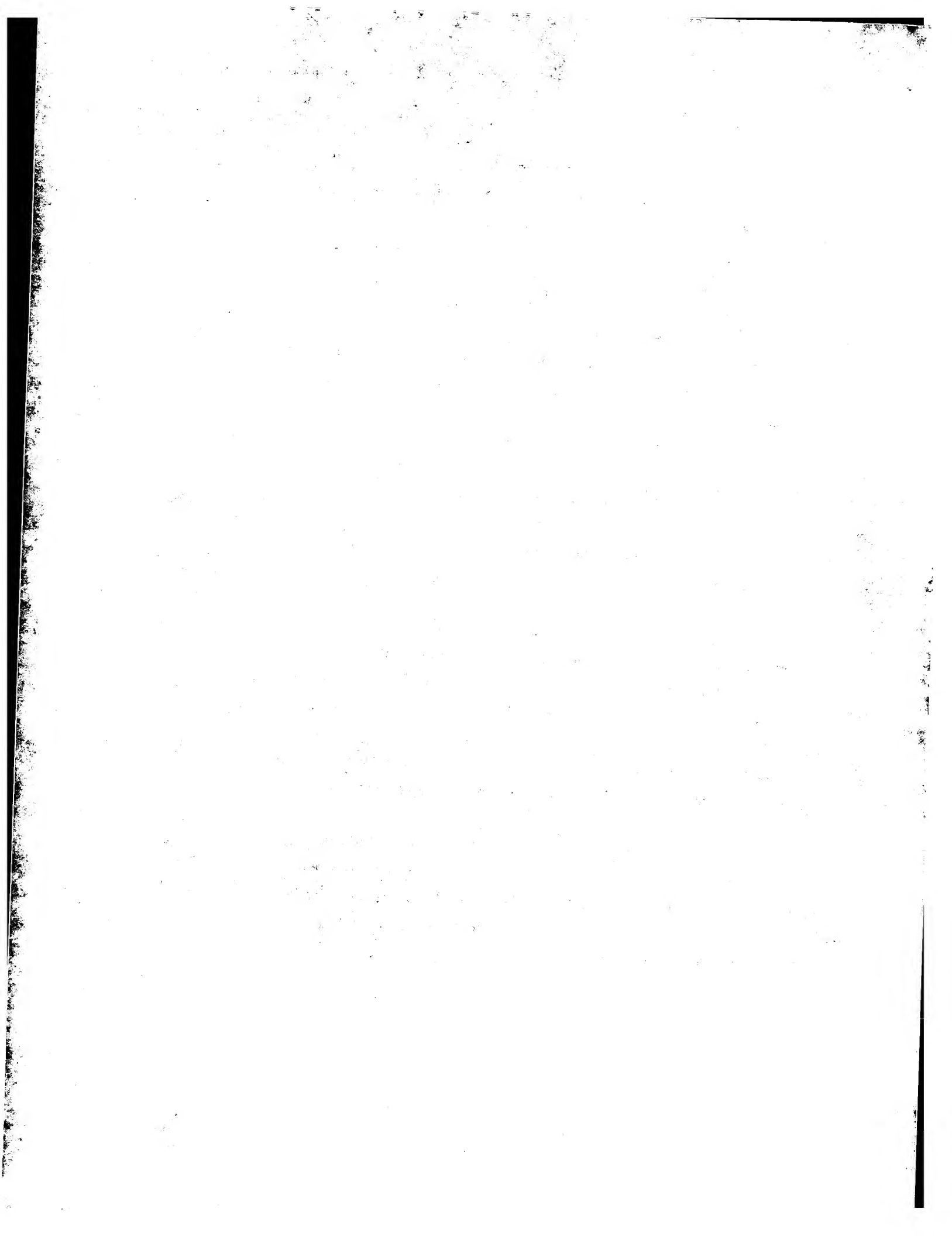
I claim:

1. A method for using a computer system to facilitate a transaction between a customer and an electronic commerce merchant, comprising the steps of:

receiving into the computer system a request for billing-risk analysis from the electronic commerce merchant, the request comprising identification information on the customer;

verifying the identity of the customer responsive to the identification information;

performing a billing-risk analysis responsive to the identification information; and

transmitting, from the computer system, the billing-risk analysis to the electronic commerce merchant.

2. The method for using a computer system to facilitate a transaction between a customer and an electronic commerce merchant of claim 1, wherein the performing a billing-risk analysis step is further responsive to a pay-later database.

3. The method for using a computer system to facilitate a transaction between a customer and an electronic commerce merchant of claim 1, wherein the performing a billing-risk analysis step is further responsive to a bill-me customer registry.

4. A method for using a computer system to register bill-me customers, comprising the steps of:

receiving into the computer system a request for bill-me registration, the request comprising identification information on a customer;

verifying the identity of the customer responsive to the identification information;

performing a billing-risk analysis responsive to the identification information; and

generating, responsive to the identification information and the billing-risk analysis, the bill-me registration in a bill-me customer registry.

5. The method for using a computer system to register bill-me customers of claim 4, wherein the performing a billing-risk analysis step is further responsive to a pay-later database.

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6.   A method for reducing electronic commerce merchant risks related to bill-me customer transactions, comprising the steps of:

packaging at least one bill-me customer transaction, wherein the at least one bill-me customer transaction was generated by at least one electronic commerce merchant;

5   and

selling the packaged at least one bill-me customer transaction to a party unrelated to the at least one electronic commerce merchant.

7.   A system for facilitating a transaction between a customer and an electronic

10   commerce merchant, comprising:

a storage device; and

a processor connected to the storage device, the storage device storing a program for controlling the processor; and

the processor operative with the program to

15   receive a request for billing-risk analysis from the electronic commerce merchant, the request comprising identification information on the customer;

verify the identity of the customer responsive to the identification information;

perform a billing-risk analysis responsive to the identification information; and

transmit the billing-risk analysis to the electronic commerce merchant.

20

8.   The system for facilitating a transaction between a customer and an electronic commerce merchant of claim 7, wherein the billing-risk analysis is further responsive to a pay-later database.

25   9.   The system for facilitating a transaction between a customer and an electronic commerce merchant of claim 7, wherein the billing-risk analysis is further responsive to a bill-me customer registry.

10.   A system for registering bill-me customers, comprising:

30   a storage device; and

a processor connected to the storage device, the storage device storing a program for controlling the processor; and

the processor operative with the program to

receive a request for bill-me registration, the request comprising identification

35   information on a customer;

verify the identity of the customer responsive to the identification information;

perform a billing-risk analysis responsive to the identification information; and

generate, responsive to the identification information and the billing-risk analysis, the bill-me registration in a bill-me customer registry.

5

11.   The system for registering bill-me customers of claim 10, wherein the billing-risk analysis is further responsive to a pay-later database.
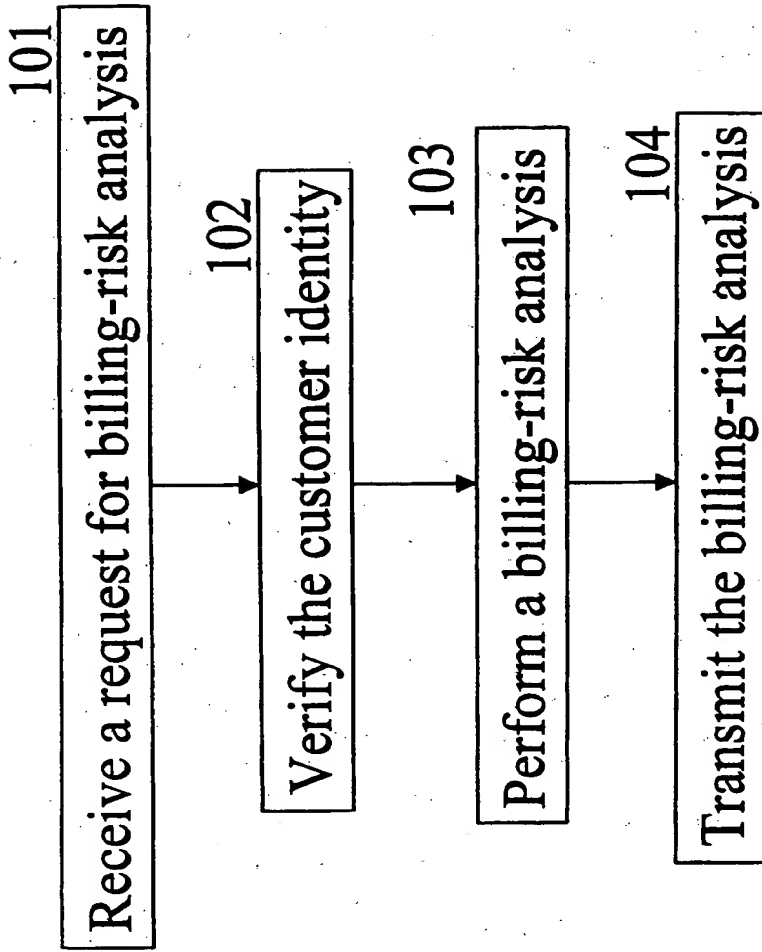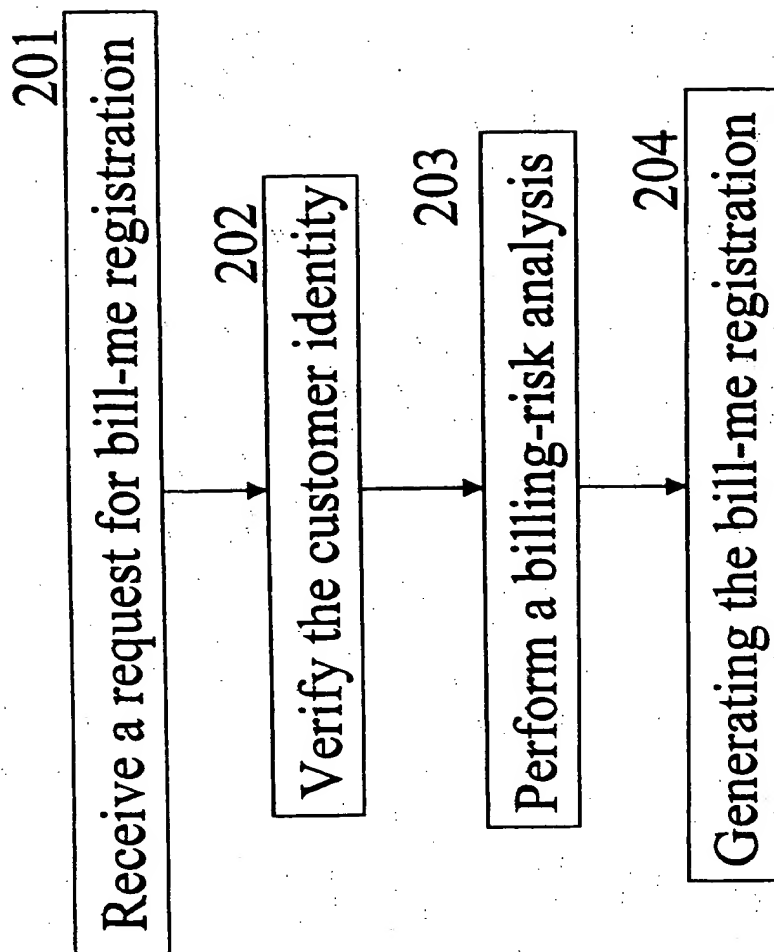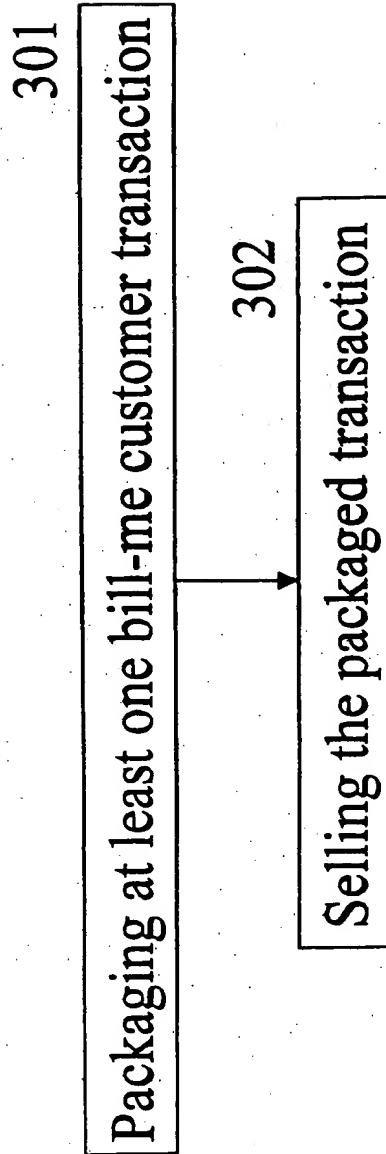
101 Receive a request for billing-risk analysis

102 Verify the customer identity

103 Perform a billing-risk analysis

104 Transmit the billing-risk analysis

FIG. 1

201 Receive a request for bill-me registration

202 Verify the customer identity

203 Perform a billing-risk analysis

204 Generating the bill-me registration

FIG. 2

301

Packaging at least one bill-me customer transaction

302

Selling the packaged transaction

FIG. 3

FIG. 4

E-Commerce Site 403

Bill-Me Requestor 404

Credit Risk Analyzer 405

Pay-Later Database 406

Customer Registry 407

Communication System 402

Customer 401

Customer 401

Customer 401
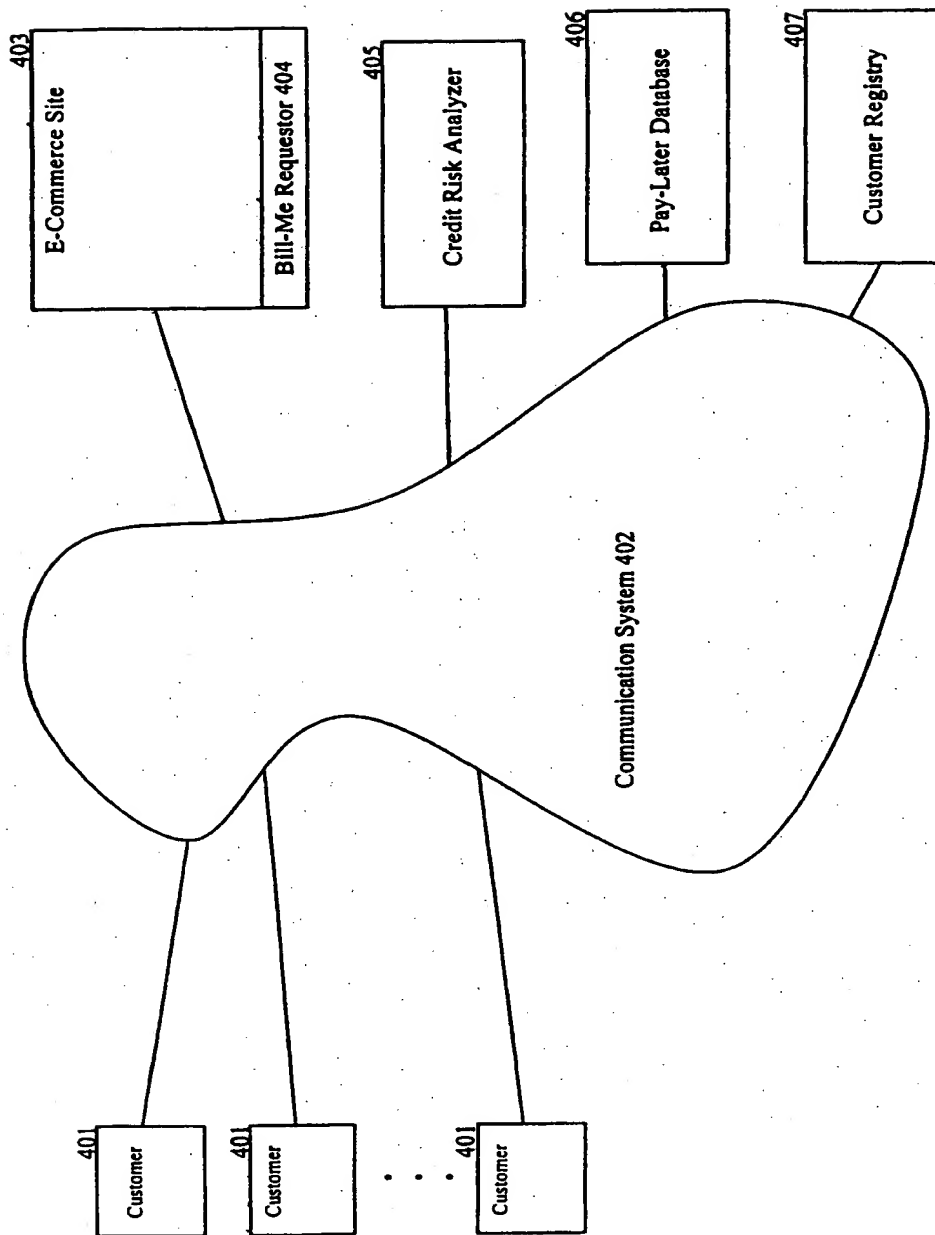
A. CLASSIFICATION OF SUBJECT MATTER

IPC(7)   :G06F 17/60
US CL   :705/38, 39, 40, 75, 76, 77

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. :   705/38, 39, 40, 75, 76, 77

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WEST, DIALOG

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,732,400 A (MANDLER et al) 24 March 1998, col. 6, line 5 thru col. 17, line 67.	1-11
X	US 5,873,072 A (KIGHT et al) 16 February 1999, col. 2, line 52 thru col. 7, line 45.	1-11
X,P	US 6,014,645 A (CUNNINGHAM) 11 January 2000, col. 2, line 45 thru col. 6, line 23.	1-11
X,P	US 6,088,686 A (WALKER et al) 11 July 2000, col. 6, line 16 thru col. 12, line 34.	1-11
A	US 5,870,721 A (NORRIS) 09 February 1999, entire document.	1-11
A	US 5,930,776 A (DYKSTRA et al) 27 July 1999, entire document.	1-11

[X] Further documents are listed in the continuation of Box C.   [ ] See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
20 NOVEMBER 2000	20 DEC 2000
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer VINCENT MILLIN James R. Matthews Telephone No. (703) 308-1065

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INTERNATIONAL SEARCH REPORT

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 6,064,972 A (JANKOWITZ et al) 16 May 2000, entire document.	1-11